PHILADELPHIA, JANUARY 17, 1880.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON PITYRIASIS RUBRA.

Delivered at the Hospital of the University of Pennsylvania

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GENTLEMEN,—I bring before you to-day a case of unusual interest and of great rarity; so rare, indeed, that some of you may never have the opportunity of seeing another. Before I go into this patient's history I will give you the diagnosis, since this may aid you in following what I shall say about the disease. We have before us an example of *pityriasis rubra*. Our patient has been in the hospital for the past six months, and doubtless some of you have seen him before. On his admission, the nature of the disease was considered, and a different conclusion was reached (with some hesitation, however) from that which has since been arrived at. It may be recalled that the patient had been in the hospital but a few days at that time, and that it was stated that the diagnosis was difficult, but that it rested between three diseases, viz., pityriasis rubra, psoriasis universalis, and eczema universale. With regard to pityriasis rubra, it was then said that this was a disease of great rarity, and one not likely to be met with. In eight or nine years no case had been seen at this clinic. It was remarked, in addition, that the existence of cutaneous infiltration and of itching and burning, together with the small size of the epidermic scales thrown off, and the comparatively small amount of desquamation, pointed away from pityriasis rubra. The diagnosis then made, provisionally, was that of eczema universale; but observation of the patient during the past six months shows that the disease is peculiar, and that it is, in certain respects, different from eczema, and is also a much graver malady than this disease. I will now give you the notes of the case during the time it has been under observation; but, before doing this, let me briefly go over the history of the affection from the beginning.

The patient is a laboring man, 56 years of age, and, until the outbreak of his present disease, healthy. None of his family, so far as he knows, have ever suffered from any affection of the skin, and he himself has all his life been free from eruptions of any kind up to within two years. About that time, being in the enjoyment of his usual health, he began to suffer from itchiness about the ears, with scaliness. This condition spread gradually over the scalp and down the back, at first giving but little annoyance, but gradually becoming more and more troublesome. By the beginning of spring (a year and a half ago) the symptoms began to increase in severity, and the disease spread until, by the end of summer, the whole surface was involved, the skin being everywhere more or less reddened, scaly, and somewhat itchy. As winter approached, the disease became aggravated at all points, and the hair, and later the nails, fell out. By the beginning of last spring it was at its height. The skin was thickened, red, and scaly. He was tortured by universal and constant itching, and his condition was pitiable.

It was at this date (April 10, 1879) that the patient applied for admission to the hospital. From the notes taken of his condition at that time, it appears that he seemed old, feeble, meagre, and worn in appearance, though he stated that he had not lost much flesh since the beginning of his illness. No healthy skin could be seen; the entire surface from crown to heel was diseased, the skin being of a uniform dusky-red color, somewhat infiltrated, and everywhere covered with thin, desquamating, whitish or grayish epidermic scales, which were constantly being loosened at their edges, curled, and thrown off in quantity,—a double handful or more in twenty-four hours,—in the form of pea- to finger-nail-size, papery lamellæ. On the palms of the hands the thickening of the skin was more decided, while the scaliness was not so marked. There were fissures in the flexures of the fingers, which were kept bent in a claw-like form. The skin of the soles was scaly, but not much infiltrated. The eyeballs were suffused, injected, and watery; the lids red and deprived of lashes. There was no exudation of fluid, no weeping or oozing; nor, according to the patient's account, had there been any moisture or discharge in connection with the disease

from the beginning. The hair, which was grayish in color, was dry, harsh, and quite scanty. It had recently fallen out copiously. The finger- and toe-nails were decidedly diseased; they were soft, bulky, greatly thickened, rough and corrugated upon their backs, and of an opaque yellowish color. These were the nails which had taken the place of those shed some months previously. The patient complained of constant chilliness, and was even affected by the changes of the weather and barometer. Burning was the severest symptom, the itchiness of the skin not being considerable enough to cause scratching. His appetite was voracious. With the view of reducing the inflamed condition of the skin, he had been subsisting for several months previously chiefly upon bread and tea. He did not, however, complain of indigestion. His bowels were constipated; urine normal in all respects. His evening temperature was 99.4° F.

On his entrance to the hospital the patient was placed upon the most nutritious diet, and was ordered daily warm baths followed by inunctions, while a diuretic mixture containing acetate of potassium was directed internally. Under this treatment his condition ameliorated to a certain extent, but beyond this no influence seems to have been exerted upon the course of the disease. I will not weary you by going into detail with regard to the various forms of treatment which have been employed in succession without much avail. In addition to the acetate of potassium, strychnia, arsenic, iron, liquor potassæ, nitric acid, and flaxseed-meal have each been tried in turn. Daily warm baths, with inunctions of cosmoline, of carbolic acid, of the various forms of tar, have been used externally without exerting more than a slight palliative influence on the condition of the skin. Recently cod-liver oil has been taken in large doses internally, and at the same time employed as an inunction.

The course of the disease during the past six months has not been marked by any decided changes, although slight fluctuations have occurred in the patient's condition from time to time. The chief change which has occurred has been in the character of the desquamation. This has always been very considerable in amount. Even now a double handful of scales, thin, papery, with curled edges and mostly small, may be gathered from his bed every morning. We do not notice this scaly condition just now, because our patient has recently been anointed; but were the inunction stopped even overnight we should have scales forming again in large quantities. The skin, you see, is of a violaceous tint, with scarcely any variation as to shade in the different regions. As to subjective sensations, these are difficult to ascertain, as the patient is stupid and seems almost in a state of hebetude. The nurse, however, tells us he is subject to onsets of itching from time to time, while burning to a greater or less degree is an almost constant symptom. His general health appears now to be steadily improving. When admitted to the hospital he weighed but one hundred and two pounds: he now weighs one hundred and twenty-one pounds.

These notes are very instructive, and our patient having been six months under daily observation, we are, of course, able to form a much better idea of the disease than when he first presented himself last spring. Observe, to begin with, the unchanged character of the disease; it is in almost every respect the same as when we first saw it. In recalling the history, we may particularly note the universal character of the disease: the involvement of hair and nails, the latter in particular being profoundly affected; the dusky violaceous redness of the skin; its dryness, with no tendency to moisture; the constant and excessive desquamation and the peculiar character of the scales; the constitutional symptoms, ravenous and unnatural appetite, diarrhœa, and debility. Finally, we may recall the rebelliousness of the disease to all treatment. These symptoms are all significant, and some are of importance, and this leads us to consider the diagnosis.

We have here, unquestionably, one of three diseases, namely, pityriasis rubra, eczema squamosum universale, or psoriasis universalis.

Pityriasis rubra is one of the rarest of skin-diseases. Since the affection was first described many years ago by Devergie in France, a case has occasionally been described as occurring in that country, in Germany, or in England. In this country but a single undoubted case has been recorded, that reported a few years ago by Dr. George H. Fox in New York, and which was, moreover, exhibited at the meeting of the American Dermatological Association last year. Now and then in

some large hospital, as that in Vienna, one or two cases are reported, which have been treated for several years without avail. The diagnosis is therefore of importance with regard to the prognosis.

Universal eczema is also a rare disease, especially in the chronic form. When it is strictly universal it usually occurs as an acute disease, lasting a few weeks or a month. Eczema, however, will almost always leave patches of sound skin here and there, and the affection is scarcely ever found, as in this case, invading every portion of the surface. In addition we have in most cases more or less moisture at one time or another and considerable infiltration of the skin, and usually very fine, branny desquamation. Here, while the infiltration is not marked, the scaling is excessive, and the flakes much larger than we find in eczema. The scales here, it will be remembered, have been as large as a finger-nail or even a quarter-dollar. The color of the skin in eczema is decidedly brighter and more vivacious and is less violaceous than we see here, for you observe that the skin is of a dusky-red, in places almost bluish, color. The nails in eczema are seldom so soft and crumbling as here, and they are generally punctate or worm-eaten in appearance. Eczema is generally accompanied by severe and almost constant itching, and, of course, with scratching. Here itching is occasional only and never severe; few or no scratch-marks can be seen, whereas burning is an almost constant symptom. In eczema there is not likely to be localized pigmentation in the form of patches, while in the case before us this is a peculiar and marked symptom. The pigmentation when found in eczema is more or less general or diffused. The course of the disease in eczema is almost always variable, the patient being at times much better than at others; exacerbations and relapses are common; it is shorter, and tends to terminate in cure; the effect of treatment is more decided. Here the course of the affection has been monotonous, with very little variation from month to month. In eczema there is little or no constitutional disturbance. Here we have observed diarrhœa, malaise, hebetude, and general debility to a marked degree.

Psoriasis is still more rarely than eczema found universal. Some places are almost always free of disease, and there is always a history of discrete patches to begin with. The color is brighter than we have here, and decidedly more inflammatory, and the skin is often the seat of burning heat and itching. There is more infiltration than in the present case, and the scales, while as large or larger, are thicker and laminated, which does not obtain in this disease; they exist in the form of an accumulation, and are more silvery and glistening in color. Here the scales are remarkably thin and papery. The course of the affection in psoriasis is variable, though less so than in eczema. The effect of treatment, especially of external treatment, is more decided in ameliorating the disease. There is no pigmentation accompanying the eruption in psoriasis; when this occurs it succeeds the latter. The nails are affected similarly to the present disease, but I have never seen them so severely affected in psoriasis or in eczema as here.

One more point to which I wish to refer: the influence of treatment, to which allusion has already been made. Tar, by way of example, which has been used here without special effect, would, if this had been eczema or psoriasis, either have done much good or much harm; and so with other remedies. Arsenic, *e.g.*, would have improved or irritated the skin. While cases have been reported as cured by carbolic acid, cod-liver oil, etc., it may be questioned, certainly, in some of these instances, whether the disease did not take its natural course. There are so few cases upon record that it is impossible to speak with certainty in regard to any of the remedies used. The influence of treatment may therefore be made use of as an aid to diagnosis; and this, in connection with the other points mentioned, has indicated clearly that we have here no other disease than pityriasis rubra.

As to the etiology of the disease, all is obscurity; not enough cases have been recorded to authorize any reasonable theory of causation. In the present case general debility seems a probable cause. The impaired condition of the nervous system noticeable may be the result of the skin-disease.

With regard to the pathology of pityriasis rubra, but few cases have been examined post mortem. In one case (Hebra's) nothing abnormal was found excepting the skin-changes, and these showed simple inflammatory alterations, affecting the upper layers of the skin only, and accompanied by some atrophy of the papillæ.

From what has already been said of the usual course of pityriasis rubra, it is evident that the prognosis must be guarded. Recovery sometimes occurs. Relapses are not rare; they may occur frequently. Dr. McGhie, of Glasgow, I remember, had a case under his care where the patient suffered seventeen years from pityriasis rubra, relapses occurring from time to time.

The treatment which we shall pursue in this case is that which was commenced a week or so ago, consisting of oleum morrhuæ both internally and externally.

Let me, in conclusion, caution you against arriving too quickly at a diagnosis in difficult cases; it is far better to postpone the diagnosis until you have had your patient for some time under observation.

(The patient was kept upon the external and internal use of cod-liver oil, the latter being pushed to the extent of an ounce four times daily for the remainder of his stay in the hospital,—some three months. No perceptible change occurred in his condition, excepting that the scales seemed to accumulate more rapidly and were of even larger size than at an earlier date.)

ORIGINAL COMMUNICATIONS.

A CASE OF IDIOPATHIC (?) PYÆMIA, OR BLOOD-POISONING, WITH REMARKS.

BY M. O'HARA, M.D.

Read before the Philadelphia County Medical Society, November 26, 1879.

ON the evening of August 3, 1878, I was called to visit ——, white, American, of very robust appearance, 50 years of age. He had felt slightly unwell for a couple of days. He stated that he had never been sick during his life; that he had sluggish liver and a costive habit.

He had a pain below the right nipple, and a slight soreness in front of the right leg, from the instep up about three inches. I carefully examined him. There was a small external pile, not irritated nor the source of any irritation. The skin of the instep was hardened from the friction of the boot-leg, but there was, beyond the hardened cuticle, no œdema, no redness, no irritation or inflammation of the lymphatics or veins, and I could find no source of trouble in this region. His pulse was 90, and temperature 103°. There was some dulness of lower portion of right lung, but no pain on inspiration. The skin was not very dry, and, with the conjunctiva surface, had a slight yellow tinge. The liver seemed slightly enlarged from acute congestion, and was not acting, he having had no movement from bowels for two days. His urine was normal. The patient refused to go to bed. He was given aconite and liq. ammon. acetat., and, also, calomel and rhubarb.

August 4, 6 A.M.—The temperature 105°, and pulse 100. Has insomnia, some headache; kidneys active. At 11 A.M. he had a severe rigor for half an hour, with marked depression, followed by a flood of perspiration lasting for nine hours. Respiration frequent, temperature 106°, pulse 92 and full. During the day he partook freely of beef-tea and milk-punch, and had taken thirty grains of quinine. At 9.30 P.M. he had a chill of less violence, followed by a less profuse sweat of two hours' duration. At 11 P.M. Dr. Nebinger was called in as consultant. Our diagnosis was congestion of lung and liver. Treatment, dry cups and blisters over liver and right lung, quinine, calomel, ipecac, and potassic nitrate, and bromide of sodium.

August 5, 6 A.M.—Temperature 101°, pulse 104. 6 P.M., temperature 103°, pulse 102, with good force. He takes nourishment and stimulants freely. He has had five free bilious evacuations; the kidneys are active. There is no jaundice; sleeps poorly. Calomel, bromide, and quinine were continued.

August 6.—Sweats freely; bowels open twice; kidneys active; does not take nourishment well. He is somewhat heavy and restless, and sleeps poorly. 6 A.M., temperature 102°, pulse 106. 6 P.M., temperature 105°, pulse 102. 10 P.M., temperature 102°, pulse 104. The respirations are not notably interfered with.

August 7.—High temperature maintained; no new physical signs or symptoms.

August 8, 7 A.M.—There is suppression of the urinary secretion to-day. Some abdominal distention with gas, and tenderness upon pressure in umbilical region. At midnight took his fourth chill, with an attendant temperature of 105°; respirations 30. There is renewed congestion of the lung, with bronchial and crepitant râles and friction-sounds at apex of left lung. His chill lasted twenty minutes, with copious sweats at the same time, which still persist. He has looseness of bowels, offensive discharges, with some tenesmus. He is getting exhausted. Pulse 120 and quite feeble. He takes very freely of nourishment and stimulants. Examination of the rectum revealed nothing; but over the right ischio-rectal region there was discovered a patch of gangrene about the size of a quarter-dollar, with adjoining parts somewhat boggy. In an hour another gangrenous patch exhibited itself below the first, and the bogginess had extended, with fluctuation. Professor Gross was now added as a consultant, and upon opening the patch there issued gas of a putrid, not fecal, odor, and it was considered to be a gangrenous

excavation. The patient sank rapidly, dying, with symptoms of thrombosis of brain, and clotting of blood in the heart, at 11 P.M., August 9, having been ill six days.

I have called this a case of idiopathic pyæmia because there was no wound or injury causing it; though this term should be dropped, as I believe there is no disease without an assignable cause.

Unfortunately, there was no post-mortem obtained; and yet post-mortems do not always clear up matters to us when there has been even a surgical injury. Take the case reported by Dr. T. W. McDowall in the *Lancet*, June 17, 1879:

In brief, the patient had a slight whitlow. At a time of good bodily health she complained of some constitutional irritation, on the 13th, 14th, and 15th of the month. On the 16th she had rigors, depression, and prostration; offensive purgings; small and weak pulse, 150; respirations 40, and shallow; the fetid evacuations became more frequent. On the 17th violent delirium set in, early collapse, and rapid death. On post-mortem, the skin was mottled; the skin of top and inside of the thumb (affected part) healthy, not gangrenous; the dura mater adherent; atheroma of the arteries of the brain, and congestion of the pia mater. The cavities of the heart contained partially decolorized fibrin, but there was nothing in the spleen, liver, kidneys, gall-bladder, stomach, or intestines to account for death. He considers that there was no cause, or the cause unknown, to explain the severity of the symptoms or the fatal termination of the case.

In the article on Pyæmia, by Bristowe, in Reynolds's "System of Medicine," he says,—

"Exclusive of a few cases in which, from want of a trustworthy history, or from some other cause, it has been impossible to determine what has been the original seat of the disease, and of a few other cases which may be found recorded, wherein, after very minute and careful investigation, nothing that could be regarded as a starting-point for pyæmia has been discovered, and which may possibly, therefore, have been idiopathic,—exclusive of these, all cases of pyæmia appear to take their origin in some one or more well-marked local conditions of disease; that it is almost invariably, if not always, preceded by some local suppuration, and that this is erysipelatous, gangrenous, or otherwise unhealthy."

To my own case and the one cited, certainly, this description will not fit.

I recall a case of chronic pyæmia I attended in 1878 for six weeks. The symptoms were frequent and irregular chills, sweats, varying temperature, recurring deposits in liver and lungs, with metastatic deposits in joints and the superficial cellular tissue. Here I was aided by Drs. Willard and Blackwood, and we could find no primary source of local infection in a wound or injury, and we considered that the only way of explaining this case was the constitutional condition of the patient himself.

Clymer, in Aitken's "Practice of Medicine," says,—

"It is not uncommon to meet with cases, more frequently happening in the course of diseases than following surgical injuries, which present all the essential characters of pyæmia. Paget proposes to call it relapsing or chronic pyæmia (it resembles the typical pyæmia in the formation of unduly-dispersed, shapeless collections of pus), in the probability that the formations are due to some infection of the blood by the entrance of diseased or septic products, and often in the occurrence of rigors, profuse sweatings, and inflammation of joints. Paget believes that the difference between groups of acute and chronic pyæmia is not greater than between cases of acute and chronic tuberculosis; that differences in degree do not constitute or prove differences in kind."

Dr. Bristowe remarks (Reynolds's "System of Medicine," vol. i. p. 200),—

"It may be asserted that the vast majority of patients have not been suffering from visceral disease, that but few of those attacked are recovering from acute disease, and that many, very many, victims of pyæmia have enjoyed the best of health up to the moment of the accident, or the operation, or the disease which has exposed them to the danger of the sudden onset of pyæmic symptoms."

To this I would reply that the man who enjoys the best of health is very rarely to be found. We meet with many cases of sudden death which formerly were called visitations of Providence, which, upon later, careful, scientific scrutiny, are found to be explainable. We are advancing daily in our explanation of hidden things. We know that many are not in perfect health who appear so. I recall here the case of Colonel Totten, engineer and builder of the Panama Railroad. He lived in the midst of malaria for some two years without being affected by it. Almost every one working under him had been affected with the disease. He seemed to be in perfect health, when he took a trip to New York, where he had a severe attack of the fever. He could not be cured of his disease until he left the air of New York and returned to

the poisoned district of Aspinwall, where his disease vanished. Now, there was in his constitution some acquired condition of blood by his residence in a malarial district which we cannot understand, and, although he appeared to be healthy, he could not have been so, and his blood must have been saturated with miasm, ready, upon the exciting cause, for the development of the fever.

Sansom says, in his work on "Diseases of the Heart," "It is fair to conclude that aortic valve lesions are often present during life, but are only discovered after death." Again, "Hence it is very probable that obstructive lesions are more frequently present than detected." He speaks of many cases brought to hospitals moribund, attacked in apparent health with sudden visceral and cerebral affections, who were not before sick, and we find, after death, obstruction of the aortic valves. Further, he says that under certain circumstances of depressed vitality the valve already diseased tends to ulcerate; the patient is seized with rigors and symptoms of septic poisoning; the débris of the ulcerated portions of the valves form plugs, which, being carried by the current of the blood, cause embolism of many arteries throughout the system and general blood-poisoning. Here is this constitutional condition preceding depraved vitality; or, what is it? A blood unfit to carry on the purposes of life, — a condition we do not recognize until the announcement of the pyæmic symptoms.

Now, atheroma in other situations is quite common, not always noticed, and the depraved condition of blood occurring may be followed by the same condition of blood-poisoning.

Dr. Seiler has mentioned to me that in all the post-mortems he has examined for the purpose of obtaining a microscopical specimen of absolutely normal healthy kidney he has never succeeded, and he has been obliged to mount the fœtal human kidney for the purpose. The same, to some degree, exists in reference to the heart; most of the hearts have some degree of degeneration. I refer to these matters to show that not many persons can be accredited with perfect health from their appearance.

The patient whose case has been described dwelt in a most fashionable part of the city. The public inlets of the vicinity at times exhale a most offensive odor. In that neighborhood, within one square of his city residence, I had occasion to notify the Board of Health, three years ago, as to the condition of the sewer under the windows of a patient who died with typhoid or septic fever symptoms after having been sick one week. I have been informed that the same offensive condition of underground drainage still remains. The condition of Mr. ——'s residence was admirably suited to develop a poisoned state of blood. His sleeping-room had a stationary wash-stand, was in close relation to an offensive water-closet, and below the sleeping-room window was an open offensive drain-pipe. He died at his seaside residence, where matters were even worse. There was a water-closet arrangement in his house communicating with a street-drain, which emptied into a creek back of his house. With each tide the flow of sewage was dammed backwards and the sewage gas driven back, and its offensiveness could be personally perceived. It seems to me that the case might perhaps be better called fæco-malarial fever than idiopathic pyæmia.

We can scarcely doubt that pyæmia can be caused by the lungs drinking in pollution undiluted. Surgical pyæmia depends upon contaminations of the blood from infective matters developed within the system; idiopathic pyæmia upon infective matters absorbed from without.

Dr. William Hunt wrote a very interesting article in the "Pennsylvania Hospital Reports," vol. i., entitled "A Contribution to the History of Toxæmia." He states that three times in ten years he was made sick by noxious emanations from the human body, that many a one exposed to the cause has been stricken down by similar attacks, and that the sickness has been called typhoid or typhus, or some analogous name, without a recognition of the direct cause. The first time, he was sick for six weeks through breathing a gush of most offensive gas upon opening the abdomen of a dead body. This time there was a period of incubation of twenty-four hours. The second time, 1865, he was for five weeks sick, after a period of incubation of one week, from inhaling the foul air from a gluteal abscess. In 1867 he was sick three weeks, after a period of incubation of twenty-four hours, through inhaling the fetid breath of a patient,

with offensive odors from a cancer. The symptoms detailed comprise all the essentials of a case of pyæmia,—anorexia, chill, high fever, delirium, rigors, offensive dejections, suppressed urine, etc. The lungs were the principal organs to suffer. He thinks he suffered from what might be called a mild case of pyæmia, but doubts that it was pyæmia, from the absence of prominent local lesions and the tendency to recovery rather than to death. He states that he was for seven years engaged in demonstrating anatomy, and never had an angry pustule while making dissections or performing operations, though very prone to cutaneous irritations, as from rhus-poisoning. Evidently there was some susceptibility in Dr. Hunt at the times of these attacks, rendering him liable to dangerous infection of his blood, and in all probability he possessed a good working power of his organs, especially the excretory organs.

I see no reason why there cannot be a mild case of pyæmia, as well as a mild scarlatina or a varioloid with a couple of spots, indicating all that one person will take as his share of a smallpox epidemic, while around him are persons dying of confluent or hemorrhagic smallpox. Some refuse in toto to take smallpox or its modification, vaccinia; but we well know that a depressed state of vitality is a great predisposing cause, and that those of vigorous vitality and healthy working organs are prone to recover when attacked with such diseases. I believe that many cases of pyæmia recover, and are mistaken for other diseases, such as malarial fever, congestive fevers, arthritis, typhoid, etc.

Dr. Cameron, of Dublin, reported (*Dub. Jour. Med. Sciences*, July 1, 1879) and, I think, established the fact of a low form of fever distributed from X.'s dairy at thirty points out of forty-two (seventy-one per cent.) with the milk delivered. He called it a non-diarrhœal typhoid; but the cases embraced the descriptions of gastric fever, typhoid fever, typhus, low forms of pneumonia, thrombosis, and typical cases of pyæmia. From my reading of the discussion on the paper, I gather that he established that X.'s dairy was the focus of infection of a fever which had as much claim to be called septic or pyæmic as typhoid.

Our knowledge of pyæmia is still chaotic. A committee of the Pathological Society of London (*Lancet*, May 24, 1879), to whom a grant of three hundred and fifty pounds was given by the government, has been working very hard for eighteen months, in co-operation with the London hospitals. Their report has not yet been published in the Society's Transactions. They make a distinction between septicæmia and pyæmia, on the ground of the absence in the one and of the presence in the other of metastatic suppurations. They make distinctions in degrees, as between septicæmia and septic intoxication. They make eight subdivisions of pyæmia, based mainly on the relations of thrombosis and softening clots to secondary abscesses, and upon the situation of those abscesses, while pyæmia due to acute necrosis and ulcerative endocarditis each occupy a place apart. They mention a fact which is striking,—the association of arthritic pyæmia with genito-urinary inflammation. In nearly all of the eighteen cases of pyæmia and septicæmia in which the blood was examined, bacteria were found, but by no means in constant proportion, nor in any constant uniformity of size and shape. They could not even trace relations between them. The facts before them justified them in believing that the presence of these organisms was rather evidence of the existence than cause of the production of the symptoms of blood-poisoning. Bacteria were observed during life, but micrococci, the spherical form of organism, which were shown by Mr. Cheyne, at a previous meeting of the Society, to be often harmless, occurred in large numbers in all parts of the tissues after death.

These organisms verge upon the "unknowable" so much, and have been so held up by surgeons and gynæcologists as an evil terror, that a reaction is setting in. Many are sceptical as to the need of "Listerism." Among others I would mention Professor Gross. In the case of chronic pyæmia to which I have alluded, I tried all kinds of antiseptics,—sulphites, carbolic acid, quinine, salicylates, and sulphide of calcium,—but the patient, nevertheless, marched slowly but steadily to death in six weeks.

Evidently Dr. Woodward ("Med. Hist. War of Rebellion") is no "bacteria fanatic," as he says, in reference to diphtheritic dysentery, the tissues must die or slough before these organisms enter them. He, moreover, says, "My own observations have satisfied me that a large part of the

substance of normal human fæces is made up of these forms, which must be estimated by hundreds of millions in the fæces of each day, viz., the spherical elements, micrococci; the rod-like bodies, bacteria; filaments composed of both, and torula."

It is possible that future observers may hail them as the normal scavengers of the human system.

THE NEW ANÆSTHETIC — THE BROMIDE OF ETHYL.

BY R. J. LEVIS, M.D.,

Surgeon to the Pennsylvania Hospital and to the Jefferson College Hospital.

IT is generally admitted that there are essentials of anæsthesia which are not satisfactorily attained by the anæsthetics in ordinary use. The inconveniences of ether and the dangers of chloroform have suggested further inquiry among the large number of chemical substances which are capable of producing insensibility to the impression of pain.

In April, 1879, my attention was directed to the bromide of ethyl by Dr. Laurence Turnbull, of this city, who was, I believe, the first to experiment on the human subject with its anæsthetic properties, testing it originally on himself and afterwards on patients undergoing surgical operations, but its physiological action on some of the lower animals had been previously determined by other experimenters.

I have since that time continued to give practical attention to the subject of the anæsthetic use of the bromide of ethyl, and, whilst recognizing the fact that a very large number of administrations is essential to determine its merits comparatively with other agents, I have now had sufficient experience upon which to, at least, base some very decided impressions of its value.

Its principal physiological characteristics which will concern the surgeon are its rapidity of action and the quickness of recovery from its effects.

As far as observed by me, it does not influence the circulation, excepting to sometimes produce a slight increase in the rapidity of the heart's action and in arterial tension or pressure. The cerebral anæmia and the fatal syncope of cardiac depression, to which chloroform is liable, are dangers which do not appear to threaten in the anæsthesia of the bromide of ethyl.

Respiration is but little influenced by the bromide of ethyl, as I have administered it, beyond the ordinary characteristics of all anæsthetic sleep; but in this respect its action seems more to resemble that of ether than of chloroform. While making these assertions, I fully recognize the fact that the ultimate effects of all anæsthetics show that they are depressing agents.

Nausea and vomiting appear to occur less frequently in the anæsthesia of the bromide of ethyl than in that of ether and of chloroform, and the rapidity of recovery from its effects must render such impressions very brief and transient.

Commencing with the occasional and very cautious use of the agent, I have more recently adopted it to the exclusion of other anæsthetics, and am recording a series of detailed observations as to its effects.

Bromide of ethyl, or hydrobromic ether, is a colorless liquid, with a specific gravity a little greater than that of water. It has a decided and characteristic odor, which is thought to resemble that of chloroform, but is less agreeable. It vaporizes more readily than chloroform, and in this respect and in density is intermediate between ether and chloroform. It seems to be entirely eliminated through the lungs, and in this regard has a decided advantage as to safety over chloroform. The high vaporizing point of chloroform does not permit a rapid elimination from the body, and it is not entirely removed by the lungs. So, when some secreting organs happen to be, from disease, incapacitated, the nervous system is liable to become overwhelmed. The odor of the bromide of ethyl remains for a longer time on the breath of a patient than does that of ether and chloroform, but it seems to be quickly dissipated from the apartment in which it has been used. Its vapor is quite unirritating to the respiratory passages when inhaled, and in this quality has the advantage over both ether and chloroform.

General excitement and the tendency to struggle occur far less frequently than in the early stages of the anæsthesia of ether, and, apparently, even in that of chloroform. It is evident that the impression on the motor centres must be very rapid, and I estimate that complete anæsthesia is accomplished in one-third less time than is the case with chloroform. The recovery

from its effects is even comparatively more rapid, in the greater number of cases the time not exceeding two minutes after the inhalation has ceased. The pupils dilate as soon as complete anæsthesia is induced, and, as the sentient state returns, they resume their normal condition. I suggest that the condition of the pupils may be an index and guide in the administration.

Anæsthesia with the bromide of ethyl is usually effected in from two to three minutes. The most rapid production of complete insensibility, in my experience, has been in one minute, in the case of a girl eight years old; the longest period has not in any case exceeded four minutes. When carefully administered, the quantity consumed has varied from one fluidrachm in the case of a child, iridectomy being performed, to eleven drachms used during an amputation of the forearm of an adult, occupying forty minutes, including the ligation of the vessels and the dressing of the stump.

The quantity of the article consumed in effecting anæsthesia will greatly depend on the method and manner of using it. Much of it is, of course, wasted by diffusion in the atmosphere. With great regard for economy, this waste may be prevented by imperviously covering the material on which it is poured. My own plan, with adults, is to pour two drachms of the bromide of ethyl on a small napkin folded up to a space of about four inches square, and then laid on a larger napkin, folded so as to be large enough to cover the entire face of the patient. It is well to secure the two napkins together with a pin.

The vapor of the bromide of ethyl is not inflammable; indeed, when dense, it extinguishes a flame if brought into contact with it. In this respect it is free from the danger incident to ether when administered at night in proximity to lights, or when the actual cautery is used. The article used by me was made by the firm of Powers & Weightman, manufacturing chemists of this city.

The ordinary essentials of the proper and safe production of anæsthesia are required in the use of the bromide of ethyl. That these essential details are apt, through ignorance or carelessness, to be disregarded, every practical surgeon is aware, and the frequent difficulties and occasional calamities will attest. When it is stated that whole pints of ether, or many ounces of chloroform, were used in the production of anæsthesia in a single case, he knows where was the fault. When it is asserted that "ether would not act and chloroform had to be resorted to," he knows why it "would not act."

It is becoming evident that the dread of unavoidable disasters from chloroform and the inconveniences of ether are tending to prevent their humane administration in many cases where the blessing of anæsthesia is due to the sufferer. This is particularly so in localities where etherization, simple and safe as it is, seems strangely ignored. In a prominent French hospital I not long ago witnessed the application of the actual cautery and other painful procedures without the resource of anæsthesia.

Whilst feeling inclined to impress caution in regard to the use of so powerful an agent as the bromide of ethyl, I am, from a basis of experience, inclined to recommend its use to the profession.

NOTES ON A CASE OF MILD TYPHUS OR TYPHO-TYPHUS FEVER OCCURRING AT THE PHILADELPHIA HOSPITAL.

BY PROF. WILLIAM PEPPER.

DESPITE the fact that a certain number of deaths from typhus fever are reported every year in the returns of the Board of Health in this city, the continuous prevalence of typhoid fever is so much more important and noticeable that it has finally resulted in a general agreement that the latter is the only form of continued fever that habitually occurs in this community. So far is this the case that I fancy the feeling of many will be the same as my own, that a large proportion of the deaths reported in ordinary years as from typhus have been cases of typhoid where a careless diagnosis has been made.

To show the comparative reported mortality from these two fevers, as well as from relapsing fever and cerebro-spinal meningitis, I have had the following table condensed from the reports of the Board of Health:

	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Typhoid fever	367	395	373	409	313	369	382	472	420	773	542
Typhus "	138	108	49	69	37	35	31	26	21	27	15
Relapsing "	.....	.....	.....	162	7	1	.....	1	.....	.....	.....
Cerebro-spinal meningitis...	102	54	36	36	44	128	246	82	83	85	56

It will be seen that typhus fever has not prevailed in what may in any sense be termed an epidemic form since 1870 (when relapsing fever was so prevalent), and that no extensive or at least no fatal outbreak of it has occurred since 1867 and 1868. It also occurred quite extensively in 1864 and 1865.

I have had the opportunity of observing and studying closely a large number of cases of typhus fever in each of the periods above mentioned, when it prevailed extensively. Certain peculiarities occur to my mind as distinctly presented by them. The severity of the disease varied markedly at the different periods. It is difficult to speak accurately on this point in the absence of any data for the calculation of the percentage of deaths in different years, since an individual experience, however extensive, may have been with a series of unusually severe or unusually mild cases. I think the type of the disease in 1864–65 was more grave than at any subsequent period. Again, it was noticeable that the characters of the typhus fever were decidedly modified by other zymotic diseases prevailing at the time: this was particularly the case with cerebro-spinal meningitis and relapsing fever. Mixed with the grave cases has always been a large proportion of mild cases, in which, while the nature of the case was undoubted, the symptoms were imperfectly developed and the duration more or less curtailed. But the most interesting and important modification, and the one most constantly present in each year, has been the presence of some of the features of typhoid fever in cases of undoubted typhus. This might have been expected whenever any large number of cases of the latter disease occurred in a community where typhoid fever is always as prevalent as it unfortunately is in Philadelphia. I have never failed to meet with such cases whenever typhus has occurred here to any extent.

The most marked peculiarities of such modified cases have seemed to me to be the occurrence of looseness of the bowels, with some slight degree of distention of the belly, slight attacks of epistaxis, and some bronchial irritation. But all doubt as to the true nature of the case, and as to the predominating morbid element present, has been solved by the more abrupt onset, the early appearance of the eruption (third or fourth day), and its characters, and by the occurrence of crisis from the tenth to the fourteenth day. When we reflect that the symptoms mentioned as coexisting (diarrhœa, epistaxis, bronchial irritation) are merely significant of the occurrence of wide-spread congestion and irritation of the mucous membranes, and are not in any sense peculiar to typhoid fever, although their appearance in any case of continued fever justifies a suspicion that the attack will prove of that nature, it is evident that the mere occurrence of these symptoms in a case of typhus fever does not authorize the assertion that the poisons of the two great fevers are associated. They may be accounted for by the supposition of a sharp catarrhal attack coexisting with the outbreak of the true typhus fever symptoms. In cases where the eruptions of both typhus and typhoid are present, as I have occasionally seen them, or where throughout the course of the case the symptoms are distinctly modified, the assumption of a dual poison is apparently necessary.

According to my observation, the mortality in cases of modified typhus fever has been remarkably small. In the cases where I have had an opportunity of making a post-mortem examination, the intestinal lesions had not progressed beyond the stage of enlargement with congestion (shaven-beard appearance) of Peyer's patches, and of swelling of the solitary glands, although in several instances the duration of the disease had been such as would have insured more advanced lesions had the case been one of uncomplicated typhoid fever. It would appear, from these and other circumstances, that, while it is altogether probable that both poisons coexist in such cases, each of them undergoes modifications which influence its activity and evolution.

I have been led to offer the foregoing remarks in consequence of the reappearance of a mild form of typhus fever in the wards of the Philadelphia Hospital after an absence of at least six or seven years. The notes of the case are briefly as follows:

J. W., æt. 30 years, living in a decent boarding-house in the northwestern part of the city, and employed on the line of the Pennsylvania Railroad, was attacked, about November 7 or 8, with fever, weakness, and headache; there were also, at first, nausea with vomiting, and some spontaneous diarrhœa, with thin, yellowish stools. He also had slight epistaxis. After the first two or three days the bowels became costive, and continued so throughout

the case. Epistaxis did not recur, and there were no bronchial symptoms.

On admission, the temperature was 104°; the pulse very rapid, small, and weak; the mind was very dull, with occasional mild delirium; the conjunctivæ were minutely injected, the pupils about normal; the tongue was very dry, but not heavily coated. A copious eruption was present when he was admitted. It existed on the trunk, front and back, on the thighs and calves, and on the arms, but was most marked on the anterior aspect of the trunk. Here the surface appeared mottled, being sprinkled quite closely with small, roundish, dark-red spots, not elevated above the surface, and, on pressure, not disappearing entirely, but leaving a persistent centre (petechial), while the peripheral zone of congestion went and came as pressure was made or removed. During the two or three days succeeding his admission the extent of the centre which thus remained persistent distinctly increased, until in some instances the whole spot was uninfluenced by pressure. No successive crops of eruption appeared.

He was treated with moderate doses of quinia (gr. xij daily), fluid diet, small amount of stimulus.

The pulse improved soon, so as to indicate a favorable prognosis. The eruption began to fade on the ninth day. During the early morning of November 18 (tenth or eleventh day) an abrupt fall of temperature from 104° to 100° occurred, with free and general sweating. That evening the temperature rose to 102½°, but fell during the night, and continued normal or even below normal. There was a corresponding fall in pulse-rate and improvement in all other symptoms, so that by November 21 (fourteenth day) convalescence was remarkably far advanced, and the man was soon after able to leave bed, and has continued well.

Postscript.—In the interval between making the above remarks and revising the printed proof of them, several cases of a similar character have been admitted to the Philadelphia Hospital.

TRANSLATIONS.

Naso-Pharyngeal Chondroma.—Herteux (*Cbl. f. Med.*, No. 48, 1879; from *Bull. de la Soc. de Chir.*) had a patient, twenty-two years of age, who had suffered for five years with an enlargement below the inner corner of the left eye. The left, and later the right, nasal passage became gradually filled up, so that the patient had to breathe through the mouth. For three years previously the left eye had been prominent; vision was diminished. A perforation had occurred through the palate. The affection was painless, the general health of the patient unaltered. On examination, the face was found broadened, nasal voice, mouth always open. Nose broad, flattened, in the upper left side a hard, roundish growth. The left eye was dislocated forward and outwards. The patient could only distinguish between light and darkness. A tumor could be observed in the left nasal passage, filling it and pressing the septum aside. The hard palate was convex, and perforated with a tumor filling the perforation. The velum was pushed forward. The naso-pharyngeal space was felt to be filled with a round, smooth, bone-like, absolutely immovable tumor. The question lay between osteoma and chondroma. A needle thrust easily into the depths of the tumor showed its cartilaginous character. There was no tendency to hemorrhage. An incision was made, beginning at the left ala nasi, running up to the inner corner of the eye, and then across the root of the nose. The soft parts being then dissected back from the bone, the tumor was laid bare and was removed, together with a portion of the upper jaw, having to be taken out piecemeal. It grew from the left side of the nose, filled the antrum of Highmore, and perforated the nasal septum. It weighed one hundred and thirty-five grammes. There was but little hemorrhage. The wound healed in three weeks, and the growth had not returned eight months later.

Chondroma of the nasal passages is very rare. Weber found it only eight times in 307 tumors of the nasal passages, and out of 267 chondroma of various parts of the body, only 8 occurred in this region.

The Influence of Certain Antiseptics upon the Bacteria of Urine.—The question as to the relative behavior of the different varieties of bacteria found in various fluids under the influence of antiseptics is one which has of late attracted considerable attention, and our columns have on several occasions within the last few months contained references to experiments made in this direction. Dr. Theodor Haberkorn, in an inaugural dissertation recently published in Dorpat, details the results of a number of experiments undertaken with a view to compare the behavior of the bacteria found in Bucholtz's infusion with that of urinary bacteria. His results are as follows. While 1 part of corrosive sublimate in 20,000

parts of Bucholtz's fluid destroyed the movements of the contained bacteria, 1 part in 25,000 was sufficient to kill those developed in urine; of thymol, 1 part in 2000 was required in Bucholtz's fluid, while 1 part in 3000 sufficed for the urinary bacteria. On the other hand, while 1 part of benzoate of sodium to 2000 parts killed the bacteria contained in Bucholtz's fluid, even such a concentrated solution as 1 part to 875 failed in urine. Dr. Haberkorn gives a table comparing the effects of benzoic acid, creasote, "carvol," and carbolic acid, and also makes some remarks upon the bactericide effect of ethereal oil of mustard.

Resorption of Extravasations of Blood.—O. Angerer (*Cbl. f. Chir.*, No. 49, 1879), in a recently published brochure, concludes as follows: (1) The injection of fermenting blood into the arteries and veins gives rise to extensive thromboses and emboli in the larger and smaller vessels of the living body. (2) In extravasations occurring in the living organism fermentation comes into play. (3) This fermentation is dependent for its degree upon the quantity of the extravasation, as well as the rapidity of its absorption. (4) The absorption of blood gives rise to fever.

The author calls attention to Professor Wahl's experience in the fever occurring after the employment of antiseptic precautions in operations. Wahl thinks that the so-called "aseptic fever" of Volkmann is probably due to the fermentive influence of the extravasated blood. In conclusion, Angerer recommends the subcutaneous injection of defibrinated blood and serum instead of transfusion. Injected in small quantities, no danger is to be apprehended. (Unfortunately for Angerer's theory, small injections of this sort do little good, and larger ones are not by any means free from danger.)

Parenchymatous Injection of Chloral in an Erectile Tumor.—Dr. Antonio Pupi (*La France Méd.*, 1879, p. 659; from *Lo Sperimentale*) had under his care a patient showing a tumor of rapid growth developed in the naso-palpebral region. Injections of chloride of iron were suggested, but rejected on account of possible danger. The galvano-caustic was also rejected, because the tumor was so near the eye. Vaccination was attempted, but failed because imperfectly performed. Simple acupuncture likewise failed; when chloral was suggested. It is known that chloral coagulates fresh blood as well as the white of egg, and that this coagulum is insoluble. Moreover, chloral is a hæmostatic and cicatrizant, which is often found to heal ulcers and varices. Chloral, therefore, was injected at three separate times, in the proportion of one to ten in water. After each injection there was almost immediate tumefaction, but there was no pain, and it only lasted four or five days. An entire cure resulted.

Odorless Iodoform. — No satisfactory method of disguising the penetrating odor of iodoform has yet been proposed. The following formula, however, it is asserted, does away with the smell entirely:

℞ Iodoformi, gr. xvi;
Bals. Peruvianæ, gr. xxx;
Vaselini,
Adipis,
Ung. glycerinæ, āā ʒij.—M.

If desired in a fluid form, the following formula may be employed:

℞ Iodoformi, gr. xvi;
Bals. Peruvianæ, ℈iiss;
Alcoholis,
Glycerinæ,
Collodii, āā ʒiij.—M.

—Dr. Lindemann, in *Allg. Med. Ctrl. Zeitg.*, 1879, No. 74.

Chrysophanic Acid (Chrysarobin) in the Treatment of Syphilitic Eruptions. —Dr. A. Reumont recommends an ointment of ʒss to ʒiss chrysophanic acid to the ounce of vaseline, to be well rubbed into the palms and soles in stubborn palmar and plantar syphilis. If rest can be procured, the inunction should be repeated night and morning; otherwise only at night. Internal treatment should of course be kept up.—*Berlin. Klin. Wochens.*, 1879, p. 322.

Tayuya. — Recent investigations add weight to the estimation of the value of this drug in scrofula and syphilis. Various writers cited in the *Centralblatt für Chirurgie* (No. 48, 1879) give notes of fifteen cases of syphilis and one of ulceration of the lip of uncertain origin cured by tayuya within a month. Alpago-Novello gives the case of a girl nine years of age, suffering with scrofulous ulcers and submaxillary lymphatic engorgement, lymphoma of the neck, etc., who was much improved under the use of the tincture. Of two other similar cases, one was almost or entirely cured, the other much improved.

PHILADELPHIA
MEDICAL TIMES.

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LEADING ARTICLES.

SIR WILLIAM JENNER ON THE TREATMENT OF TYPHOID FEVER.

SIR WILLIAM JENNER, perhaps the greatest living authority on this subject, having been invited recently to deliver an address before an English medical society,* chose as his theme "The Treatment of Typhoid Fever," a subject upon which he had never previously published his opinion. We regret that we cannot reproduce here the earlier part of Sir William's address, in which he speaks of the disease in general, its normal course, etc., but must proceed at once to indicate in a general way the plan of treatment which he recommends. And first, rest, quiet, and fresh air are insisted upon. With regard to diet in general, the patient should be restricted to liquid diet, with farinaceous food, and bread in some form if the appetite requires it. Broths should be varied, and strong vegetable essences may be added to them. The indiscriminate employment of milk in almost unlimited quantities as diet in fever has led to serious troubles. Curds are often found in the weakened stomach, where they may remain unchanged and produce considerable disturbance of the system. A patient with temperature unduly raised, restless, sleepless, or drowsy, vomits a quantity of curds, and at once the restlessness ceases, the temperature falls, and the patient drops into a quiet sleep. Or, the undigested curds may accumulate in the bowel, inducing flatulent distention and pain, restlessness, and increased febrile disturbance. In one case, an enema brought away a large vesselful of offensive, sour, undigested curds. A pint of milk is equal to a mutton-chop, and yet two quarts, and even more, of milk in twenty-four hours are sometimes given. Can such an amount of solid animal food be digested? and, if it could, is such an amount of animal food good for a patient suffering from typhoid fever? He is weak because of the presence of the fever, and not from lack of food.

An unlimited amount of pure water should be allowed; it passes off by the kidneys, skin, lungs, etc., and is of much service as a depurating agent. If the bowels are confined in the early stage of the disease, a simple enema may be given; otherwise irritation and catarrhal inflammation of the bowel may be produced, with troublesome diarrhœa. Small doses of mineral acid well diluted are grateful and may be of use. The frontal headache common in the earlier stages of the fever is sometimes best allayed by cold applications, while in other cases warm ones are better. These, together with darkness and quiet, are usually sufficient. For the sleeplessness, which is sometimes a serious symptom, Sir William gives henbane, chloral, and bromide of potassium. He has seen good results from a combination of the latter, and no ill effects when used before the stage of nervous prostration. If the patient's temperature be high, a tepid bath or sponging the surface will often at once induce sleep and no drug be required. Opium, though sometimes useful, is on the whole a most dangerous remedy. In the early stage of fever it disturbs digestion and checks secretion. In the later stages he has seen several cases fatal from its influence on brain, heart, and secreting organs, and at this period condemns the use of direct sedatives, both opium and chloral.

The chief causes of diarrhœa, in addition to the specific intestinal changes, are—1, error in diet, including excess of fluid; 2, catarrhal inflammation and irritability of the bowel. So long as the stools do not exceed four or five a day, of moderate quantity, this is rather an advantage; but when from their number or quantity the patient becomes reduced, treatment, varying with the pathological condition producing the diarrhœa, must be instituted. When the stools are strongly alkaline, sulphuric acid sometimes affords marked relief. When merely frequent, four ounces of starch-water thrown into the rectum morning and evening will often check this frequency. Three to ten drops of laudanum in an ounce and a half of starch-water may be employed *after* the passage of the stool. When very offensive, a teaspoonful of animal charcoal, two or three

* Lancet, vol. ii., 1879, p. 175.

times a day, will correct the fetor. Carbonate of bismuth, in twenty-grain doses every four or six hours, is the best remedy for catarrhal inflammation of the bowel itself. If the bowels are constipated, a small daily enema of thin gruel may be used. Laxatives should never be given by the mouth.

Sir William is no believer in the efficacy of turpentine applied externally in flatulent distention. Pepsin and acid administered with the food, or the administration of partially-digested food, is often advantageous, as is also charcoal. The long intestinal tube may be occasionally introduced. Alcohol, in fit doses, improves the nerve-energy, and so increases temporarily the muscular power of the intestinal and abdominal walls.

When blood, in ever so small a quantity, is observed in the stools, the patient is to be kept in the recumbent position. He should not be allowed to make any effort, and on no consideration to sit on the close-pan or raise himself or be raised by others to pass urine, etc. If the patient is unable to pass urine when in the recumbent position, the urine should be drawn off by catheter. All movement of the bowels should be restrained as far as possible, and for as long as possible. An ounce of starch-water, with ten or fifteen drops of laudanum, may be given at once as enema, and then a dose of acetate of lead every two or three hours by the mouth, with three to five drops of laudanum, or fifteen grains of gallic acid in a wineglass of iced water, every two or three hours, with the laudanum. Sir William thinks he has seen benefit from small doses of turpentine. It is a point of the greatest moment to keep the bowels empty, and therefore nourishment should be given in the most concentrated and absorbable form,—*e.g.*, essence of meat in tablespoonful doses frequently repeated. All nourishment which leaves solid residue—*e.g.*, milk—should be avoided. Lumps of ice should be sucked, and all essence of meat, etc., be iced. When the loss of blood is sudden and copious, or is frequently repeated, the subcutaneous injection of ergotin may be employed, and an ice-bag applied over the region of the ileum. The faintness due to considerable sudden bleeding from the bowel should not be removed by stimulants unless it immediately threatens life.

Perforation of the coats of the intestine by the extension of the ulcer in depth, and finally by sloughing of the peritoneum, is, so far as his certain experience goes, always fatal.

In profuse perspiration, the patient's skin should be dried with a warm napkin every few minutes if necessary, and dry cloths placed between the wet linen and the skin; alcohol may also be given. Death has occurred from asthenia when the nurse has carefully covered up the sweating patient and enveloped him, so to speak, in a vapor-bath.

Temperature so high and continuous as to be a cause of danger, either directly or indirectly by favoring serious degenerative changes of structure, is present in exceptional cases only, and for such cases alone is the direct application of cold to the general surface required.

Alcohol, by the influence it exerts on the nervous system, is of the greatest value in the treatment of typhoid fever, but it should only be given for the purpose of attaining a definite object; its effects should be watched, and the dose so regulated as to attain the desired effect from as small a quantity as possible. As the treatment in reference to many symptoms is, in the present state of our pathological knowledge, tentative, it may have to be varied frequently, both as regards continuance and dose of drugs, of stimulants, and of cold. Sir William's experience has impressed on him the conviction that that man will be the most successful in treating typhoid fever who watches its progress not only with the most skilled and intelligent but also with the most constant care, and gives *unceasing attention to little things*, and who, when prescribing an active remedy, weighs with the greatest accuracy the good intended to be effected against the evil the prescription may inflict, and then, if the possible evil be death, and the probable good short of the saving of life, holds his hand.

CORRESPONDENCE.

LONDON LETTER.

THE editor of the *British Medical Journal* has taken to reading my letters, and has inserted some extracts from them in his journal. I appreciate the compliment, but I fail to understand his motives in the selection of the paragraphs which, taken alone, may give offence to sundry persons, and his utterly

ignoring those which would give universal satisfaction: perhaps they are not comprehensible by an Aryan mind. He disapproves of some of my remarks, and the following are extracts from the calm and dispassionate language of his judicial rebuke:

"This singular and monstrous production:" "it is evidently an article manufactured for foreign consumption, and highly salted to bear exportation:" "we must call this correspondent's attention to the extreme impropriety of such utterly unwarrantable statements as he is in the habit of using to fill up his correspondence:" "utterly absurd calumnies:" "is really outstepping the usual privileges of historical fiction." Of Mr. Hart's great abilities as an editor there can be no two opinions, but whether he is always as discreet as he is able admits of question. He is a clever journalist, but when he aspires to pose as a *censor morum*, then, I think, he is curiously forgetful of his own history. Personalities are not in my line, but if ever I should descend to them my first letter will be devoted to an accurate account of the present editor of the *British Medical Journal* and of his relations to the profession, though I cannot venture to hope that all that I shall then say will meet with his approval. He objects to my alluding to the closed wards of St. Thomas's, yet writes, "It is most true that a block of the building is unused, in consequence of the lay administrators having overbuilt."

As to my remarks on "doctors' wives," I have nowhere even insinuated that their position is merited, as has been assumed. It must be remembered that this is an old and, socially, a very conservative country, and it is only since 1815 that the profession, as a body, has had anything like a social status. Before then, men could set up as doctors without any examination, and on the strength of an apprenticeship to a doctor only, and even without that, some having commenced their career as stable-boy or errand-boy to a doctor. Consequently, doctors' wives have not yet gained a recognized social standing, such as they must get in time. According to Macaulay, in Queen Elizabeth's time the chaplain was not allowed to marry the lady's maid without the consent of her mistress; but now a clergyman's wife has a very good social position. The position of the medical profession is rising, and some day in the future a doctor may be made a peer, but such rank is denied to medicine, though the sister professions, as they are termed, are not so treated. The Church has a number of lords spiritual in its bishops, while successful lawyers commonly are made peers. It is nonsense for us to say that our profession is recognized here socially as it deserves to be, in the face of this fact, while the treatment of the medical officers in the army and navy has deluged our journals with letters of complaint for years back. A recent royal warrant has improved matters, but whether it will be adhered to or not after the present urgent demand for doctors for the services is mitigated to some extent, will remain to be seen. I know nothing of club-life, but since the notices of my letters have appeared in the *British Medical Journal* I have had a good deal of information afforded to me about the social position of the profession; and it appears that at the very select clubs doctors are not eligible for election, and that comparatively very few are to be found in the literary Athenæum Club,—the home of literature. If the profession are really satisfied with their social position, then, surely, a great deal that I have read in the medical journals for the last twenty years was unnecessary and unjust. I believe that up to the time of the Crimean War an assistant-surgeon in the navy could be flogged; and it has only been from its necessities, and not from its voluntary action, that the War Office has given anything to the profession. Whenever it has had a fair supply of doctors, it has played fast and loose with its warrants; when dire necessity has compelled it to do something, that something has been as little as possible and been given in the most grudging spirit. The profession, as a body, scarcely has a recognized standing. Each unit has its own social status. Some stand high, like Sir Wm. Jenner, though he would not get more than his merits if he were made a peer; while at the other end of the profession are men who give advice and medicine for fourpence (see the *Medical Press and Circular* for November 22, 1876). Each man makes his own position, to a large extent, for himself and by himself; and he starts handicapped, in my belief. There are prospects of something better in the future, and the British Medical Association will, in my belief, have much to do therewith. Through it the profession are commencing to have a distinctly articulate voice, and the welding together of the different units of the profession is being achieved by their annual meetings and by the Association's journal. And I say, readily and willingly enough, that much is due to Mr. Ernest Hart for the manner in which he has worked to attain this end; while the number of members of the Association has been immensely increased of late years, and the committees of the Association, in which he takes a prominent part, are doing good work, and deputations from them are even received by our legislators. But whatever the profession has got it has struggled for and fought for. It has had nothing spontaneously given to it. Socially, each man is a unit rather than one of a recognized body; each and every doctor stands on his own merits or demerits; and the same may be said of each doctor's wife, whether she may be one of those who can attend a royal levee, or a poor, in-

dustrious woman with a large family, who cheerfully divides the work of the household with a single maid-of-all-work. Surely, one may describe things without, in doing so, being censorious; but to some minds this distinction seems incomprehensible, and silence or praise is alone to be practised. I am very much tempted to transcribe a letter written to me lately in reference to a practice offered for sale, which shows up the seamy side of the profession in a very illustrative manner, and tells a tale of some of those men of whom the profession are not proud, not to put too fine a point upon it. But perhaps, after all, it will be more discreet to withstand the temptation.

Having described the general practitioner,—the all-around man, who does everything, whether in town or country, and who has a consultation when in difficulties,—it may be well to describe the consultant. It is my experience to find that Americans, doctors and other, do not have very definite ideas on the subject of consultants, and, still more, specialist-consultants. Even the leading and best-known men in the United States of America are more general practitioners than is the case with leading men here. Talking with an American doctor one day, I casually remarked that I had sent a certain patient to another consultant; he remarked, "Well, I should not send a patient to another doctor until I had had a good try at him myself." And it is clear that Americans, when over in Europe, study a whole variety of departments; very rare exceptions studying special subjects, and those only laryngoscopy, ophthalmic and aural surgery. Some devote much attention to diseases of women, and others to diseases of the urinary organs. Nor does it seem that there is any strong tendency towards specialism in the United States of America,—*i.e.*, men do not work and write so much on diseases of some one system, and stick to that, and that almost only, as is the case here. Here we find a certain set of men who are known in relation to diseases of the nervous system, of whom the best known are Russell Reynolds, C. Bland Ratcliffe, J. Hughlings Jackson, Ferrier, and others; while Bucknill, Hack Tuke, Maudsley, L. Forbes Winslow, and others, are consulted rather in cases of mental derangement than in what are known as diseases of the nervous system not affecting the intellect. Others, again, are known as specialists in diseases of the chest; some rather for lung-diseases, others rather for diseases of the heart. A whole host of men are devoted to obstetrics and diseases of women, some going in rather for obstetrics, others for diseases of women. Garrod stands almost alone as an authority on gout. Here the same thing holds good of surgeons, nearly every one now devoting his attention to some special subject, as Sir Henry Thompson, who devotes himself exclusively to diseases of the urinary organs. Indeed, it is now almost essential to success that a man who decides to become a consultant shall devote himself specially to one subject, write articles on it, write a book on it, and have his name known in connection with that subject, so that the general practitioner shall know of him as a specialist in that department, and consult him accordingly. It is the quickest way to become known, and brings in patients without much delay. Then, of course, the growth of special hospitals has largely fostered this attention to special departments; the specialist heads for the special hospital, which welcomes him, and is glad to have him as an addition to its staff, while an appointment to a special hospital expedites the specialist's progress towards practice. By such means a number of men readily succeed in the world who in by-past days would have had a long, hard struggle unless they had the good luck to become attached to a general hospital. The staffs of general hospitals hunt in packs; the surgeon calls in his physician colleague, and he again, if required, his obstetric colleague. Of course this is done, more or less, all the world over. Specialists, in order to attempt the same thing, are largely arranged in groups, and send patients back and forwards, and so are of mutual advantage to each other. There are men who will poach, but I very much doubt if that pays in the long run. Then, of course, each specialist cultivates the general practitioners who consult him or call him in,—invites them to dinner, and presents them copies of his books.

Consequently, then, in different little areas over the country we find nearly all the people of a certain neighborhood will almost invariably go to certain consultants, while at another place the names of these consultants are unknown, and everybody goes to two or three other consultants. For instance, I have a nest of patients in South Wales, but how I came by them in the first place I have not the faintest idea. When the general practitioner wants a consultation he pitches upon some one known to him, or on some one whose name is associated with the disease under which the patient is suffering. In many cases the choice is determined by the patient, who prefers the man with the better-known name. Then the patient comes up to town, or the consultant is called down, as the case may be. At other times the patient goes to London to see a certain authority without the cognizance of his ordinary medical attendant, and then trouble is looming. The consultant takes a different view of the case, or sees it in a later phase, and uses different language about it from that used by the ordinary medical attendant, and then there is discord. Duplicity is innate in some persons, while others, again, delight in making mischief. So the consultant has often some difficulty in finding out

the patient's ordinary doctor and communicating with him, so as to prevent any unpleasantness. Then some doctors are more "touchy" than others, and readily take offence, so that it is a delicate matter to interfere with their patients when they turn up in one's consulting-room. And then I fear—but now I know the editor of the *British Medical Journal* has his watchful eye upon me—there are men to be found who are so attractive that they soon convert the patient who comes to them for a casual consultation into a regular patient, and the patient's general attendant sees him or her no more. Of course much of this is due to the inclinations of the patients; but in some cases there must be something in the ways of the consultants, or otherwise some men are much maligned. Often the consultant is placed in a very delicate position by want of frankness in a patient. Some men think they have a vested interest in the patient who once consults them, and are sore if the patient sees any other professional man with or without their cognizance. But, it is clear, this is a false view of the case: a wine-merchant may as well complain that his customers sometimes buy wine elsewhere. In the old days, so well described by George Eliot, people were as much divided about their doctors as about their ministers, and to change their doctor was as serious an affair as to change their place of worship. Any change involved want of confidence, and so was damaging to the doctor, and offensive to his clients and upholders. Especially can this be seen in the north of England, in villages equidistant from several doctors in different directions. Certain families always go to one place, while others as certainly and surely go to the other place, and that, too, even when there is a change of doctors. But all that has died out, in London at least, and a lady will intrust herself to one medical man for anything about her head; for her lungs she consults another man; for her heart a third; for her liver she consults a fourth man; for her stomach a fifth; her womb, of course, is under the care of a sixth specialist; and, equally of course, to none of these would she go in case she had any trouble with her rectum. But there is no jealousy among these consultants, and if she wished to see them all together the only difficulty would be that of their all being able to be present at the same time. Or a person comes up to town, and sees several consultants on the same day or following days, and then takes the advice that is most agreeable, or with which the patient's own ideas are in unison. A specialist may see a proportion of cases which are not exactly in his line, but the bulk of his patients come with maladies in his department. Of course he may so impress the patient that he or she returns with some other malady; a surgeon may so skilfully treat a stricture that the patient returns with piles or a tumor. The specialist is paving the way for specially educated consultants. The old plan was largely to commence in more or less general practice, devoting attention, perhaps, to some subject more than others, and then in time, as skill increased and brought with it repute, the experienced individual was called in to give counsel in the practices of other men. But now a man prefers to select some particular department, and sedulously cultivates himself in that direction,—goes abroad to see the practice of celebrities in that branch, learns all he can, reads all the books on the subject, writes articles on it, or reads papers at societies, or joins in discussions on the papers read by others, translates a foreign work on the subject, or perhaps ventures to write one himself. By so doing he certainly does acquire a very great deal of knowledge on the subject, and if he is a man of sound good sense, and keeps himself well up with medicine generally and his own subject particularly, then he is a very useful member of society. This last class of men is decidedly on the increase at the present time, and the line of demarcation betwixt the general practitioner and the specialist-consultant is becoming more defined every year.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

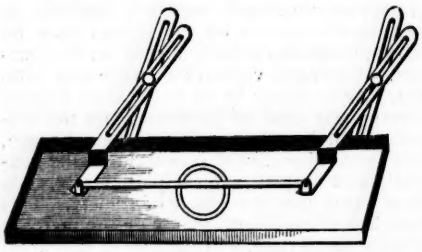
AT a conversational meeting of the Society, held at the hall of the College of Physicians, Philadelphia, November 26, 1879, Dr. Henry H. Smith, President, in the chair, Dr. Carl Seiler presented a New Immersion Microtome, and exhibited a number of large sections, thrown upon the screen by means of the lantern. Dr. Seiler's remarks were as follows:

IMMERSION MICROTOME.

The microtome which I exhibit here this evening is in principle the same as the one I showed last spring, and it differs only in use and in the fact that the sections can be cut under alcohol.

A large microtome well, two inches in diameter, is secured in the bottom of a cast-iron trough, six by eighteen inches, and an inch and a half deep, which can be fastened by screws to the work-table. At the back rim of the trough two arms of brass extend out some eight inches, having a slit cut in them, in which the pivot for the levers is secured by means of a set-screw. The levers carrying the knife are eleven inches long, and are bent in the shape of a Z, so that when one end is secured to the pivot the other end, carrying

the clamp for holding the knife, dips into the trough. The advantages which this instrument has over others are, first, that by means of the slit in the arms carrying the pivots the latter can be moved so as to place the knife in any desired position without changing the length of the levers; second, that the full sweep of the knife in any position can be obtained; and, third, that large and thin sections can be made without fear of breaking them in cutting, as they float off in the alcohol, and can be floated on to a piece of glass for further preparation.



Dr. Chas. B. Nancrede approved very highly the ingenious improvement in section-cutters that had been presented by Dr. Seiler to this Society at a conversational meeting held last May. By means of these large sections mistakes are avoided, that, by taking only minute portions of a growth for microscopic examination, are almost inevitable. At a former meeting the speaker had mentioned some cases illustrative of the truth of this statement. A small portion of a tumor was presented to the Committee on Morbid Growths of the Philadelphia Pathological Society, and by them pronounced to consist simply of fibrous tissue. When a section was subsequently made through the whole growth, by Dr. Seiler's process, it was found that the growth was very largely epitheliomatous, but that the former section had only included the normal fibrous capsule of the growth. For this reason he would urge the more frequent study of large sections, as it gives a more faithful representation of the growth.

Dr. Seiler recalled the case spoken of by Dr. Nancrede, and mentioned another similar one, occurring recently, where a growth was microscopically examined by three different observers: one pronounced it an enchondroma; the second, a myeloid sarcoma; and the third found a mixed growth of spindle- and round-cells. After making a section of the entire tumor, he will be able to decide the relation that these elements bear to the entire growth, in order to state what are its prevailing characters. The case has recently died, and secondary sarcomatous deposits were found in the lungs, which favors the view of its primary character being a sarcoma.

Dr. O'Hara reported a case of supposed Idiopathic Pyæmia (see page 184).

DISCUSSION UPON SEPTICÆMIA OF OBSCURE ORIGIN.

Dr. Seiler said that in making a post-mortem examination it is difficult to decide whether or not the organs are absolutely healthy. When preparing a set of histological preparations a short time ago, he had found extreme difficulty in obtaining specimens of the normal heart and kidneys. He had examined a large number of human kidneys, and in the adult he had always found some microscopic evidence of fatty or amyloid degeneration, or of cirrhosis; he could not get what he considered a healthy condition of the organ, except in young infants, when the kidneys are first flushed with urine. In the adult domestic cat we know that the kidneys are always fatty. In examining the heart-tissue, he had often found fatty or granular cells in the muscular fibrillæ, even when they retain their striæ. Minute free oil-globules were found in the nuclei of the cells, while the cells retained their shape. He had examined at least a hundred cases in which death had occurred from accident or from disease of other organs, but the heart and kidneys were not, in his estimation, sufficiently healthy to be used for histological studies.

The Chairman, Dr. Henry H. Smith, suggested the following points for discussion in connection with the case presented by Dr. O'Hara: first, What is pyæmia? and, secondly, Was this a case of pyæmia?

Professor William Pepper expressed regret that the autopsy could not be secured, as this would have settled conclusively the nature of the case reported by Dr. O'Hara. There seemed to be little doubt, however, that some septic process had been present, such as would legitimately bring it within the group of diseases to which the term pyæmia is applied at present.

The cases of such character arising independently of any external traumatic causes are so numerous and so important that he thought the Society was indebted to Dr. O'Hara for having brought the subject before their notice. As illustrating some of the different types of medical pyæmia, he would briefly allude to the following cases. A healthy man, a keeper of a beer-saloon, had probably received some slight blow or strain about the epigastrium. After some vague and ill-defined symptoms the case assumed the character of a fully-developed pyæmia, ran a rather rapid course (death occurring in ten days), and at the autopsy the lower extremity of the spleen was occupied by a large abscess, the fetid contents of which apparently had resulted from the disintegration of an area whose vessels had been plugged up by thrombi, tending to putrefactive decomposition, instead of to contraction and organization. Allusion had been made by the speaker to the pyæmia attending ulcerative endocarditis, but the following case would illustrate

a different connection between cardiac disease and pyæmia. A patient with severe mitral disease gradually developed symptoms of chronic pyæmia. At the autopsy, emboli were found in very many parts of the body; some of which, as those in the mesenteric arteries, had led to aneurismal dilatation of the vessels, while others, particularly those in the spleen and kidney, had undergone putrefactive degeneration, and the septicæmia had resulted from reabsorption of these liquid products. Again, pyæmia and septicæmia undoubtedly occur frequently from the absorption of infectious material through the mucous membranes, or possibly the skin. He repeatedly had had occasion to observe cases where exposure to emanations from decomposing organic matter had been followed, not by typhoid fever, but by an illness undoubtedly pyæmic in nature.

Some years ago he saw a case, in consultation with the late Dr. George Pepper, where a privy-cleaner died after symptoms of acute septicæmia. Multiple abscesses were found in the liver, with plugging of the small vessels. There had been no injury, no external centre of suppuration, no attack of dysentery: the most probable explanation seemed to be that the disease had resulted from the absorption of septic matter from the alimentary canal.

These brief remarks merely served to indicate his belief in the considerable frequency of septic disease of a medical origin, as contrasted with those having a surgical or a puerperal origin, and to indicate a few of the various ways by which they may arise.

Dr. Charles K. Mills said that multiple embolism is of more frequent occurrence than is supposed. In the case reported the condition was, without doubt, that of pyæmia. In similar cases cardiac thrombosis probably sometimes takes place, or a thrombus forms in one of the larger vessels, and this subsequently breaking up, and being distributed by the blood-current, multiple embolism, with its various symptoms, occurs. He had recently sent for publication to a foreign medical journal, in connection with other cases, an example of multiple cerebral embolism, in which seven areas of softening, the result of embolisms, were found in the cortical structure of the brain, and also a large foyer in one of the basal ganglia. Some of the closed vessels leading to these necrotic areas were discovered. With the assistance of Dr. Shakespeare he had examined all the vessels removed from the brain, both macroscopically and microscopically, and had detected a number of points of complete occlusion, without corresponding foci of softening. Collateral circulation appears sometimes to prevent the necrobiotic process. In the case referred to, fatty degeneration of the heart and granular atrophied kidneys were present. Possibly the delirium in cases like Dr. O'Hara's, and also in his own case, might be accounted for by capillary occlusions, on the view advanced by Bastian, that this symptom is often due to plugging of the fine capillaries of the cortex of the brain.

Dr. Charles B. Nancrede suggested that the abrasion upon the ankle referred to by Dr. O'Hara might have produced pyæmia, by causing a phlebitis of the smaller which extended into the larger veins. Cases of this kind are mentioned in Holmes's "System of Surgery," he believed. In one of the London medical societies, a few years ago, cases were reported by Prescott Hewitt and others, showing that so slight a cause as an irritated pimple may produce fatal pyæmia. It is not necessary, therefore, to confine our attention to the large vessels or important wounds, etc., to discover the cause in a given case of blood-poisoning.

Dr. George Hamilton regretted the absence of an autopsy in the case reported, as the cause of death then might have been better understood. Persons in apparent health often have unsuspected organic disease. Butchers find in some of the finest-looking animals they kill ossification of the heart, abscesses in the lungs and liver; and it is believed that this is even more common in the West than it is here. He did not think it at all surprising that human beings might have similar disease without being aware of it. Several days before the death of Dr. George McClellan he had met him apparently in full health; three days later he died, and it was found that he had ulcers in the colon at the sigmoid flexure, with perforation of the bowel, which must have required a much longer time for its development than his short illness would give. Dr. Joseph Parrish was very healthy and active until shortly before his death, when an autopsy revealed that he had extensive disease of one of his kidneys, that had not been suspected during life or in his last illness.

Dr. J. L. Ludlow reported a case of latent cancer of the liver. Symptoms of indigestion appeared and grew steadily worse; death occurred at the end of six weeks, when long-standing cancer of the liver was detected.

Dr. W. R. D. Blackwood said that every physician of experience has met with cases presenting symptoms of blood-poisoning, which are very difficult to account for except on the supposition of the inhalation and absorption of septic matter through the lungs. He reported a case in point. A butcher had been asked to remove the hide of a horse which had died from some ordinary malady. The man delayed for several days, and until decomposition had set in. He flayed the horse, but in a few hours violent symptoms of blood-poisoning appeared, and in the course of two days the man died. It was an undoubted case of pyæmia, without a single scratch upon the surface. Dr. B. was satisfied that the whole trouble originated from the inhalation of odors from that dead horse.

Personal susceptibility and peculiar conditions of the body have much to do with the development of blood-poisoning. He had lived in a very malarial region in the South, but had never contracted chills, but twice since his return he has had chills. On two occasions he delivered a woman of a putrid fœtus with adherent placenta, and each time the labor was protracted; as a result he had three or four marked chills, and was very seriously ill, with decided septic symptoms.

Dr. Nancrede observed that the fact of there being no breakage of the skin would not invalidate the view that absorption nevertheless took place by the skin. The case of Sir James Paget illustrates this point. In making a post-mortem in a case of purulent effusion in the chest in a case of pyæmia, although his hands were protected by antiseptic ointment, and there was not the slightest scratch upon them, he subsequently had inflammation of the lymphatics of one arm, followed by blood-poisoning, from which he nearly lost his life.

Dr. Henry H. Smith reported a similar occurrence as happening to himself while in Paris in 1839. While operating on a fresh subject nearly every day, and spending considerable time in the dissecting-rooms, he absorbed some noxious matter without having any wound of the hand. From this he had angeioleucitis and erysipelas, barely escaping with his life. It was a case of undoubted absorption through the cuticle.

Ths lungs without doubt can absorb not only gaseous but also solid material, which will find its way into the blood-vessels. Particles of charcoal are often found in the bronchial glands of the charbonnières of Paris, who handle constantly this substance; the deposit of carbon in the lungs and neighboring glands that infiltrates the intercellular tissue being constantly noted in the Parisian post-mortems of these workmen.

Referring to Dr. McClellan, as alluded to by Dr. Hamilton, the speaker saw him for the last time at an operation performed by Dr. Wm. E. Horner, the case being the removal of a breast, under the anæsthesia of ether, about 1847. Dr. McClellan was greatly delighted with the results of the operation and the unconsciousness of suffering by the patient, and was quite vivacious in his expressions of satisfaction at the result. He certainly presented no evidence then of disease, though within twelve hours afterwards he was taken sick with an illness that speedily terminated his life. After death the chronic condition already spoken of was discovered.

Dr. O'Hara, in conclusion, said that the gravity with which the symptoms set in during apparent health indicated blood-poisoning, which, in his opinion, might be due to gangrenous thrombosis. There was no evidence of ulcerative endocarditis. The abrasion referred to, on the ankle, was carefully examined by several physicians, and we found only a thickening of the skin, without any sign of inflammation or abscess.

Dr. Wm. Pepper read the notes of a case of mild typhus or typho-typhus fever (see page 189).

HYDROBROMIC ETHER, OR BROMIDE OF ETHYL.

Dr. Laurence Turnbull said that in the summer of 1877 he had introduced the use of hydrobromic ether to the profession. He first experimented upon himself as to its safety and the advantages of it as an anæsthetic, and since that time he had employed a large quantity in numerous operations, which are recorded in his work. Since the publication of the second edition he has added many other cases, in all about one hundred. The doctor brought the use of this ether before the British Medical Association at Cork, and recommended its use as a sedative in certain hysterical and nervous forms of deafness and noises in the ears, by introducing the vapor by the middle ear, also administering it internally. He had read a paper before the Pharmaceutical Section at the International Congress at Amsterdam, and there proved the following facts in reference to it:

First. That it was safe as an anæsthetic, being rapid in its action, and also being eliminated from the body quickly.

Second. It was much more agreeable in its odor and taste than the ordinary ether, and therefore can be used in a private office or lady's chamber.

Third. The cost is now about thirty cents per ounce, and almost any ordinary case can be brought under its anæsthetic influence.

Fourth. Vomiting is very rare, unless the stomach has been recently filled to repletion.

Fifth. Recently, in the Pennsylvania Hospital, Dr. R. J. Levis informed him that he had employed the hydrobromic ether with perfect success in numerous protracted operations. Also, he had a letter from Chicago that Dr. Byford and one other surgeon of that city have used the ether with entire success in protracted operations.

Sixth. That the pulse is increased in force and volume, and respiration very slightly increased over the normal; the pupil did not seem to be influenced except in a slight degree.

Seventh. In some cases there remains an odor like mustard about the patient, where the ether has been used in a protracted operation.

A resolution was adopted tendering a vote of thanks to the authors of the papers read.

REVIEWS AND BOOK NOTICES.

A DICTIONARY OF GERMAN TERMS USED IN MEDICINE. By GEO. R. CUTTER, M.D. New York, G. P. Putnam's Sons.

Every medical man who has had to study German, isolated from German physicians, must have shared our vexation and that of

the author of the dictionary before us in being often baffled in the attempt to fathom some polysyllabic medical expression. At one time in our earlier steeple-chases across the rough grounds of German lore, *decubitus* seemed the barrier over which our mental Pegasus would not spring or soar; and many a time a half-hour has been spent in vain in searching through dictionaries and in attempting to work out by the context some unknown term. One day, in delight, after reading some review, we sent a missive, post-haste, to Germany for Tolhausen's "Technologische Wörterbuch," concerning which three-volumed book we desire to bear impartial witness as to its full and complete worthlessness to the medical man.

The task set by Dr. Cutter is one much needed to be done, *i.e.*, to be well done; and the vital question is as to how Dr. Cutter has performed it. Practical use through some months can alone enable one to determine finally the real value of a dictionary like the present: so that we do not feel able just yet to speak authoritatively. But on looking over the book we have detected no mistakes,—a negative virtue,—and on looking out a dozen or so unusual terms have failed to find only two or three.

We trust that Dr. Cutter will meet with such encouragement from the profession as will speedily enable him in a second edition to render still more perfect that which seems to us very satisfactory for a first edition. We earnestly recommend every medical student of the German tongue—and the young physician who does not study German must remain in the rear of his generation—to aid both himself in his studies, and Dr. Cutter in his efforts to provide aids for study, by buying the volume.

HEALTH PRIMERS. THE SKIN AND ITS TROUBLES. New York, D. Appleton & Co., 1879. 12mo, pp. 94.

This little book is one of a series similar to the well-known collection edited by Dr. Keen. Although bearing an American imprint, it is of English origin, and is English in the point of view from which it is written. The author, who is anonymous, but is evidently a dermatologist, writes in a pleasant, easy style, and gives much useful advice, not only on the care of the skin proper, but also of its appendages, particularly the hair. He appears to be rather a fanatic on the use of the bath, and attributes the occurrence of many disorders of the skin to want of cleanliness,—an old theory, but one which is not, in this country at least, supported by practical experience.

PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES. By GEORGE HENRY FOX, A.M., M.D. Parts V. and VI.

Dr. Fox's Atlas continues to keep up to the standard initiated by the earlier numbers. Eight pictures of eczema in its various forms are given, together with one illustration of varicose ulcer and one of psoriasis annulata. The pictures of infantile eczema are very good, as is that of eczema barbæ. The photographs of eczema papulosum and of psoriasis seem to have been taken at too great a distance; but with these exceptions the representations are as good as photographs can be.

THEORY AND PRACTICE OF MEDICINE. By FERD. T. ROBERTS, M.D. Third American from the Fourth London Edition. Philadelphia, Lindsay & Blakiston, 1880.

We announce with pleasure a new edition of this excellent manual, the original edition of which we reviewed some time since in our columns. The changes in the present edition are only such as were required to keep the book abreast of the advancing science.

GLEANINGS FROM EXCHANGES.

SUCCESSFUL OPERATION FOR DROPSY OF THE GALL-BLADDER.—At a recent meeting of the Royal Medical and Chirurgical Society (*Lancet*, vol. ii., 1879, p. 730) a paper was read on a case of Cholecystotomy performed for Dropsy of the Gall-Bladder, due to the Impaction of a Gall-Stone, by Mr. Lawson Tait. The author referred to the success attending ovariotomy as leading to the adoption of abdominal section for other pelvic and abdominal tumors likely to affect seriously the life of the patient, unless of a cancerous nature. Dr. Hanfield Jones had the merit of first suggesting the extension of it, particularly to cases of threatened death from gall-stone impaction. Dr. Marion Sims was the first to follow out the plan, but unsuccessfully, and the present case was the first successful one. The patient had been married eighteen years, had borne six children, and menstruation was normal and health good till the summer of 1878. At that time she had spasmodic pains in the right side, aggravated by walking and lifting slight weights. A swelling, noticed in September, slowly increased, and during last winter pain became more intense, and she presented a cachectic appearance, suffering from incessant headache, sickness, and obstinate constipation. The seat of pain was over the right kidney, where there was a heart-shaped tumor, firm and elastic, without fluctuation, tender to the touch, and movable towards each side. The urine gave only negative results. At a consultation no decided diagnosis was attempted, and the opening of the abdomen was agreed upon, which was performed on the 23d of August, in the middle line, to the extent of four inches. The tumor was found to be a distended gall-bladder, containing a white, starchy-looking fluid, and two large gall-stones, one lying loose, and the other impacted in the entrance of the duct, and

adherent to the mucous surface. The latter was removed after a tedious and very difficult operation (fully described in the paper). The stone and fragments weighed 6.11 grammes. The wound in the gall-bladder was stitched to the upper end of the wound in the abdominal walls by continuous sutures, leaving the aperture into the bladder quite open, and closing the rest of the abdominal opening in the usual way. The operation was performed antiseptically under ether. The patient rallied completely in a few hours, and the dressings of the wound were found stained with healthy bile. The flow of bile from the wound continued till September 3. The wound was completely healed on September 9, when the patient began to take solid food, up to that time the diet having been restricted to milk and beef-tea. On the 30th she went home quite restored to health.

FATTY DEGENERATION OF THE HEART DUE TO THE ANÆMIA OF TYPHOID.—At a recent meeting of the London Pathological Society (*Lancet*, vol. ii., 1879, p. 764) Dr. Goodheart exhibited a specimen of fatty degeneration of the heart from a boy six years old, admitted under Dr. Pavy, at Guy's Hospital, on the seventeenth day of an attack of typhoid fever. The temperature reached 105°. On the nineteenth day there was severe hemorrhage, which recurred on the twenty-first, together with epistaxis, and death was rather sudden. The heart showed marked fatty degeneration of its muscular fibres, and there was extensive ulceration of the intestines, especially of the colon, whence the hemorrhage had taken place. The interest of the case lay in the connection between the anæmia induced by the hemorrhage and the occurrence of fatty degeneration of the heart. Some cases of such degeneration in fevers could be attributed to the febrile process itself, but here it seemed to be in direct relation to the loss of blood. He had seen four other cases of severe hemorrhage lead to this cardiac condition. The change was in the form of minute granules—not actual fat-globules—entirely replacing the normal striation.

DIGITALIS HYPODERMICALLY IN FLAGGING HEART.—In a recent clinical lecture Professor Da Costa called attention to the use of digitalis hypodermically for the purpose of sustaining a flagging heart. Two drops of the fluid extract are equivalent in strength to fifteen minims of the tincture. This amount (gtt. ij), well diluted with water, is what he generally uses, and he has always found that it answers all the purposes of hypodermic medication excellently. This dose can, of course, be repeated as often as necessary.

TREATMENT OF CARDIAC DYSPNŒA.—Professor Sée (*Concours Méd.*; from *Lond. Med. Record*, 1879) has found the iodide of potassium work well in all cases of continuous cardiac dyspnœa, particularly when this is connected with some structural lesion. It is equally useful in valvular lesions. No evil results can occur from its use, even if a mistake is made and the affection is asthmatic. The iodine liquefies the bronchial secretion. The dose is twenty grains a day, gradually increased to two or two and a half scruples. A good formula is—

℞ Potas. iod., ʒvss;
Syr. aurantii cort., fʒiv.—M.

Sig.—Two to four teaspoonfuls a day in a tumbler of water.

Patients suffering from heart-disease are more tolerant of iodide of potassium than other patients. The contra-indications to its use are—1, tendency to hemorrhage; 2, loss of flesh; 3, loss of strength; 4, loss of appetite. Opium may be added to prevent iodism. Another useful combination is digitalis with iodine, as one has a soothing influence on the dyspnœa by acting on the lungs, and the other increases the action of the heart and modifies the arterial tension. The following formula will be found to answer well:

℞ Potas. iod., ʒss;
Tinct. digitalis, fʒss;
Syr. acaciæ, fʒiv.—M.

Sig.—Dessertspoonful four times a day.

When digitalis is unsuitable, chloral may be substituted.

USE OF THE LEVER IN CONTROLLING HEMORRHAGE IN HIP-JOINT AMPUTATION.—Mr. Richard Davy, who a few years ago drew attention to the *per-rectum* compression of the aorta and iliac arteries for the temporary arrest of hemorrhage during the performance of operations, and practically demonstrated the efficacy of the method in amputation of the hip-joint, now returns to the subject (*British Med. Jour.*, vol. ii., 1879, p. 685). Mr. Newman, of Glasgow, has recently described a special knife and india-rubber band for compressing the flaps during amputation at the hip-joint. Mr. Davy thinks that this is applied too low down, as Pancoast's tourniquet applied over the aorta is too high up. He thinks that in future surgeons will compress the common iliac artery per rectum. The lever used by Mr. Davy is figured in his paper. It is turned out of ebony, and varies in length from eight to twenty-two inches. Its surface is very smooth and polished, and its ends are rounded off much like the fingertips. The maximum transverse diameter is five-eighths of an inch; the minimum, three-eighths of an inch. The rectal end is graduated to an inch scale, so that the surgeon who applies the lever can at once learn whereabouts may be the end of the rod. The points of advantage claimed by Mr. Davy are: (1) most perfect control of the required artery; (2) minimum amount of disturbance of the circulatory system; (3) independence of the respiratory movements; (4) its general and easy applicability, strictured rectum being the only obstacle; (5) it is easy for the assistant to

maintain pressure, and at the same time keep out of the way of the operator; (6) safety of application; (7) cheapness, simplicity, and success. Mr. Davy gives the record of ten cases in which the lever was used; the total amount of blood lost during the ten operations having been under eighteen ounces.

ANTISEPTICS IN OZÆNA.—Mr. Lennox Browne (*British Med. Jour.*, vol. ii., 1879, p. 691) uses the following solution, both in the nasal douche and as a gargle:

℞ Boracis, ʒiii;
Acid. salicylic., ʒii;
Glycerinæ, fʒiiss;
Aquæ, ad fʒi.—M.

One or two drachms of this mixture to the half-pint of water at 95° Fahr. acts quite sufficiently. It has the advantage over and above its antiseptic qualities of being not only neither irritating nor obnoxious in taste, but, on the contrary, of being even emollient and of agreeable flavor. This formula is of especial value in the cases of ulceration, which, when occurring in the nostrils, is now considered to be always due to syphilis. But when the ozæna arises from catarrhal inspissation, retention, and consequent putrefaction of the normal secretion, a solution of chloride of ammonium and borax, about ten grains of each to the half-pint of warm water, acts admirably in clearing away the offensive accumulation and in restoring the mucous membrane to healthy secretion.

A TASTELESS SALINE PURGATIVE.—M. Yvon finds that the disagreeable taste of sulphate of magnesia may be completely concealed by the addition of a few drops of the essence of mint, provided that the quantity of the vehicle be small. He advises that ʒvi of the sulphate should be dissolved in about ʒi of water, two or three drops of the essence of mint being then added; or the flavoring agent may be added to the salt, and the patient directed to dissolve the whole in as small a quantity of water as possible.—*Paris Médical*, 14th August, 1879; *Lyon Médical*, 31st August, 1879.

A CASE OF PLEURO-PNEUMONIA TREATED WITH ERGOT OF RYE—RAPID RECOVERY.—Dr. Alexander Boggs (*Brit. Med. Jour.*, vol. ii., 1879, p. 772) was called to see a woman suffering with pneumonia of the right lung, with pleurisy. Effusion having taken place at the end of a few days, Bonjean's liquid extract of ergot was prescribed with liquor ammoniæ acetatis. A consultation held at this time determined thoracentesis as imminent, but within three days the fluid had been entirely absorbed and this operation rendered unnecessary. The patient made a good recovery.

NITRITE OF AMYL IN UTERINE HEMORRHAGE.—Mr. Kerr adds his testimony to the usefulness of this remedy (*British Med. Jour.*, vol. ii., 1879, p. 691). He considers the *rationale* of its effect to be rapid dilatation of the cervical vessels. Attending a rather severe case of post-partum hemorrhage, Dr. Kerr administered five minims of the nitrite by means of an inhaler, with immediate and happy results. The hemorrhage ceased at once and permanently, and the patient was restored from a state of collapse.

TREATMENT OF MUCOUS POLYPUS OF THE NOSE.—Reginald Harrison (*British Med. Jour.*) punctures these growths from the anterior nares by means of an ordinary acupuncture needle, thus allowing the fluid of which they largely consist to drain away. To prevent the growths from refilling, the patient is directed to inject a solution of carbolic acid in glycerin. When the polypi are accessible, this plan is preferable to avulsion.

MISCELLANY.

CONFLAGRATION FROM THE USE OF THE THERMO-CAUTERY DURING ANÆSTHESIA FROM ETHER.—The *British Medical Journal* (November 22, 1879), from a French source, gives an account of an operation under ether for arthritis of the knee-joint, in which the actual cautery was employed. Five ounces of ether had been employed. The window had been opened, the room was large, and the ether-bag was to a certain extent separated from the thermo-cautery. Suddenly the room was in flames, and the bed was enveloped in them. The ether-bag was thrown down on the floor and the patient quickly removed. She was only slightly burned, but the physician who was administering the ether was severely injured. Similar accidents have been noticed elsewhere. Ignition does not occur when the wire is only heated to redness: a white heat is necessary. Some years ago Dr. Dolbeau practised local anæsthesia with ether spray on the hæmorrhoids of a patient about to be operated upon. The apparatus having been removed, the red-hot iron was applied, but the ether vapor caught fire, and produced a general conflagration and extensive burning of the surrounding parts without affecting the hæmorrhoids.

PRIZE FOR ESSAY ON DIPHTHERIA.—The Empress of Germany has offered a prize of two thousand marks (five hundred dollars) for the best essay on diphtheria. The conditions are that the writer is to bring forward important *new* facts as to the essential nature (*das Wesen*) of the disease, especially with regard to the infectious matter which propagates it, its dissemination, and the means for arresting its progress. The essays may be written in German, English, or French, and must be sent to Professor v. Langenbeck, Berlin, N. W., 3 Roonstrasse, on or before December 15, 1880. The committee which will award the prize consists of Professors

Klebs, of Prague; Liebreich and Virchow, of Berlin; Von Nageli and Oertel, of Munich; and Thiersch, of Leipsic. Each essay is to have a motto corresponding to a similar motto on a sealed envelope containing the author's name.

TO WHOM DOES THE FŒTUS BELONG?—Our Parisian contemporary, *Le Praticien*, of November 24, records an accident provocative of considerable commotion among the unmarried ladies present. The occasion was a ball given in honor of a wedding at the *mairie* of a small French town. In the middle of the ball one of the dancers stooped down and pulled up a strange mass, which, on examination by a *sage-femme* who was present, was declared to be a fœtus. There was great emotion, and the question arose, whom to suspect, and to whom did it belong? There were a number of young ladies, unmarried, and it would be difficult to make a special examination of them all. The difficulty was, however, eventually solved by a newly-married lady who was present confessing that she was the late proprietress of this veritable apple of discord, and, according to *Le Praticien*, it had passed from her without any pain or warning of the occurrence.—*Medical Press.*

GERMAN MEDICAL STUDENTS.—The number of medical students in the German universities during the summer semester of 1879: Berlin, 609, of which number 197 are military students or cadets; Munich, 503; Würzburg, 458; Dorpat, 436; Leipsic, 389; Greifswald, 244; Breslau, 181; Freiburg, 174; Tübingen, 174; Zurich, 168; Strasburg, 166; Bonn, 144; Halle, 143; Göttingen, 141; Bern, 138; Grätz, 137; Heidelberg, 136; Marburg, 126; Königsberg, 125; Erlangen, 121; Jena, 100; Giessen, 98; Kiel, 97; Basel, 77; Rostock, 37. Vienna has during this same semester 697 regular students, besides from 100 to 150 irregular students, who remain one or two semesters and are not matriculated. These consist of strangers, and three-fourths of them are Americans.—*Pacific Medical Journal.*

INFANT INSANITY.—Paulmier, in 1000 cases of insanity, had ten children; John Turnam, out of 21,333 cases, had eight children under ten years and 1161 between ten and twenty years.—*Amer. Jour. of Obstetrics.*

MARTELLEMENT.—The tribunals of the Seine-Inférieure have recently been occupied with a curious case relating to the voluntary mutilation which young men practise upon themselves in order to escape the conscription. The operation is termed *martellement*, and consists in producing the deformity of one or more toes by causing a contraction of the flexors, the individual so operated upon walking on the ends of the toes instead of supporting himself on his plantar surface. As the result of an inquiry that has been instituted, it appears that *martellement* has been practised in the locality for more than forty years, and that since 1839 all the conscripts, with the exception of three, have gained exemption. No information has been obtainable as to the mode in which the operation is performed. The young man who was accused, formerly a good walker, has of late seldom left the house, and for some months has ceased to appear at the village balls; and on examination it was found that he had recently undergone *martellement.*—*Rev. Méd.*, October 11.

DUPLICATING PRESCRIPTIONS.—A recent medical act in Wisconsin reads as follows: "If any physician practising medicine in this State shall write or cause to be printed on any prescription the words 'No duplicate,' any vender of medicines who shall duplicate such prescription without the physician's consent shall be subject to a fine of ten dollars for each offence."

The *Louisville Medical News* comments as follows: "We wish this law prevailed in Louisville. Here one prescription, gotten on credit, and often never paid for, is used by an individual or a family indefinitely, and, besides, is often loaned to friends and relatives. It is pleasant to know, however, that the modest and moderate-charging druggist gets his little one hundred per cent. every time the ℞ is filled."—*N. Y. Med. Record.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 28, 1879, TO JANUARY 10, 1880.

VOLLUM, E. P., MAJOR AND SURGEON.—Relieved from special duty in connection with inspection of veterinary supplies, and to resume his station at Jefferson Barracks, Mo. S. O. 291, A. G. O., December 29, 1879.

HEGER, A., MAJOR AND SURGEON.—To proceed, on or before February 1, 1880, to San Antonio, Texas, and report in person to the Commanding General, Department of Texas, for assignment to duty. S. O. 3, c. s., A. G. O.

CLEMENTS, B. A., MAJOR AND SURGEON.—Having relinquished his leave of absence, assigned to duty at Willet's Point, N.Y., relieving Surgeon Anthony Heger. S. O. 3, A. G. O., January 6, 1880.

FORWOOD, WM. H., MAJOR AND SURGEON.—Assigned to duty as Post-Surgeon, Fort Omaha, Neb., relieving Assistant-Surgeon R. Barnett. S. O. 121, Department of the Platte, December 29, 1879.

WHITE, R. H., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of Texas, to proceed to New York City, and report by letter, upon arrival, to the Surgeon-General. S. O. 293, A. G. O., December 29, 1879.

TAYLOR, B. D., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—To report in person to Commanding General, Department of the East, for assignment to duty. S. O. 292, A. G. O., December 27, 1879.

HALL, WILLIAM R., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Columbia, and, upon expiration of his present leave of absence, to proceed to New York City, reporting his arrival, by letter, to the Surgeon-General. S. O. 293, A. G. O., December 29, 1879.

APPEL, D. M., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Missouri, and, upon expiration of his pre-ent leave of absence, to proceed to New York City, and report by letter, upon arrival, to the Surgeon-General. S. O. 293, c. s., A. G. O.